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Respectfully submitted,

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What is claimed is:

1. An advanced water treatment process for bringing minute bubbles of ozone into contact with water to be treated, which contains harmful substances, such as dioxins and PCB, thereby carrying out oxidative destruction of the harmful substances.

2. The advanced water treatment process according to claim 1, wherein the minute bubbles of ozone have an average particle diameter of 0.5 to 3 μm.

3. The advanced water treatment process according to claim 1, wherein the minute bubbles of ozone have an average particle diameter of 10 to 20 μm.

4. The advanced water treatment process according to claim 1, wherein the minute bubbles of ozone have an average particle diameter of 50 to 60 μm.

5. The advanced water treatment process according to claim 1, wherein the minute bubbles of ozone have an average particle diameter of 20 to 80 μm.

6. The advanced water treatment process according to ~~any one of claims 1, 2 and 5,~~ Claim 1 wherein the minute bubbles of ozone are supplied to a water pipe connecting one treatment tank with another treatment tank, both tanks being installed in a treatment system.

7. The advanced water treatment process according to ~~any one of claims 1, 3 and 4,~~ Claim 1 wherein an ozone treatment

tank for bringing the minute bubbles of ozone into contact with the water in a retentive manner is arranged within a treatment system, and the ozone is blown from the bottom of the ozone treatment tank to cause a forced convection of the water within the tank.

8. The advanced water treatment process according to claim 6 or 7, wherein the ozone treatment tanks are arranged at respective successive stages, such that waste ozone in a latter-stage one of the ozone treatment tanks is circulated to a former-stage one of the ozone treatment tanks.

9. The advanced water treatment process according to ~~any one of claims 1 to 8,~~ claim 1 wherein prior to an ozone treatment, or posterior to the ozone treatment, a treatment by using a hydrogen peroxide solution is carried out for the water to be treated.

10. The advanced water treatment process according to claim 9, wherein a foul-odor air generated from the water within the treatment system is formed into minute bubbles such that the minute bubbles of the foul-odor air are mixed into the hydrogen peroxide solution for oxidative destruction thereof.

11. The advanced water treatment process according to claim 10, wherein the minute bubbles of the foul-odor air have an average particle diameter of 0.01 to 0.02 mm.

12. The advanced water treatment process according to ~~any one of claims 9 to 11,~~ claim 9 wherein prior to the treatment by using the hydrogen peroxide solution, the water to be treated is adjusted to a pH of 8 to 10.

13. The advanced water treatment process according to ~~any one of claims 9 to 12~~ Claim 9, wherein at least one of gold, copper oxide, and iron oxide is thrown into the water which is to be subjected to the treatment by using the hydrogen peroxide solution, thereby promoting an oxidation treatment by the hydrogen peroxide solution.

14. The advanced water treatment process according to ~~any one of claims 1 to 13~~ Claim 1, wherein prior to the ozone treatment, an electrolysis treatment is carried out for the water to be treated.

15. The advanced water treatment process according to ~~any one of claims 1 to 14,~~ Claim 1 wherein an ultraviolet radiation treatment is carried out for the water to be treated after the ozone treatment, the water containing residual ozone which did not act in the oxidative destruction of the harmful substances.

16. The advanced water treatment process according to claim 15, wherein after the ultraviolet radiation treatment, an electrolysis treatment and a carbonized filter medium contact treatment are carried out for the water to be treated.

17. The advanced water treatment process according to ~~any one of claims 1 to 16~~ Claim 1, wherein an ultraviolet radiation treatment tank is arranged within a treatment system, the ultraviolet radiation treatment tank having an ultraviolet light source arranged therein and inner walls thereof coated with titanium dioxide, ultraviolet ray is irradiated onto the inner walls to thereby cause a photocatalytic

treatment for deodorizing a foul-odor within the ultraviolet radiation treatment tank.

18. An advanced water treatment system for purifying water to be treated, which contains harmful substances, such as dioxins and PCB,

the advanced water treatment system comprising an ozone treatment tank for bringing minute bubbles of ozone into contact with the water to be treated, thereby carrying out oxidative destruction of the harmful substances.

19. The advanced water treatment system according to claim 18, including ozone supply means for supplying the minute bubbles of ozone to at least one of the ozone treatment tank and a water pipe arranged on a water inlet side of the ozone treatment tank.

20. The advanced water treatment system according to claim 19, wherein the ozone supply means forms ozone into minute bubbles having an average particle diameter of 0.5 to 3 μ m.

21. The advanced water treatment system according to claim 19, wherein the ozone supply means forms ozone into minute bubbles having an average particle diameter of 10 to 20 μ m.

22. The advanced water treatment system according to claim 19, wherein the ozone supply means forms ozone into minute bubbles having an average particle diameter of 50 to 60 μ m.

23. The advanced water treatment system according to claim 19, wherein the ozone supply means forms ozone into minute bubbles having an average particle diameter of 20 to 80 μ m.

24. The advanced water treatment system according to ~~any one of claims 18, and 20 to 24,~~ Claim 18 including the ozone treatment tanks arranged at respective successive stages, such that extra ozone coming up from the water to be treated in a latter-stage one of the ozone treatment tanks is circulated to a former-stage one of the ozone treatment tanks.

25. The advanced water treatment system according to ~~any one of claims 18 to 24,~~ Claim 18 including a hydrogen peroxide solution treatment tank at a water inlet side or a water outlet side of the ozone treatment tank.

26. The advanced water treatment system according to claim 25, including foul-odor supply means for forming a foul-odor air generated from the water within the treatment system into minute bubbles such that the minute bubbles of the foul-odor air are mixed into the hydrogen peroxide solution.

27. The advanced water treatment system according to claim 26, wherein the foul-odor supply means causes the minute bubbles of the foul-odor air to have an average particle diameter of 0.01 to 0.02 mm.

28. The advanced water treatment system according to ~~any one of claims 18 to 27~~, Claim 18 including an ultraviolet radiation

treatment tank at an outlet side of the ozone treatment tank, the ultraviolet radiation treatment tank having an ultraviolet light source arranged therein and inner walls thereof coated with titanium dioxide.

29. The advanced water treatment system according to claim 28, wherein the ultraviolet radiation treatment tank has a plurality of partition walls coated with titanium dioxide, the partition walls being arranged such that a distance between adjacent ones thereof is within 30 cm.

30. The advanced water treatment system according to claim 29, wherein the ultraviolet radiation treatment tank has a body in the form of a bottomed hollow cylinder extending vertically, an ultraviolet lamp being arranged in a diametrical center of the body, with the plurality of partition walls having plate surfaces radially extending toward the ultraviolet lamp positioned in the center of the arrangement of partition walls.

31. The advanced water treatment system according to claim 30, including a carbonized filter medium treatment tank arranged at a water outlet side of the ultraviolet radiation treatment tank, the carbonized filter medium treatment tank having a conifer carbonized filter material obtained by carbonizing raw materials of plural kinds of conifer, including cedar, pine, and Japanese cypress (hinoki) at a high temperature range of 800 to 900°C.